CHAPTER 1

STANDARD ASSET TRACKING SYSTEM (SATS)

Section 1A—SATS INFRASTRUCTURE.

1.1. Chapter Summary. The Standard Asset Tracking System (SATS) was developed to improve the process of tracking assets through base level supply channels and to reduce the amount of paper produced and stored in Base Supply. SATS puts the control and responsibility of the property in the hands of the person who has the property. Barcoded labels, identification numbers, and passwords are used throughout the system to track and move assets through the supply process and clear document control records on the SBSS. SATS utilizes Automatic Identification Technology (AIT) equipment, WIN 95 Personal Computers (PC), and WIN NT servers. Document Control Records (DCRs) are cleared real time, eliminating the need for paperwork to be forwarded to Document Control for quality control and microfilm systems that are used for mass storage. Accuracy of input is improved by the use of scanning, removing some of the human error. SATS internal edit help prevents erroneous dual inputs by verifying the document numbers before sending them to the Standard Base Supply System (SBSS). For specific SATS screen processing, system administration, and available reports see the SATS user Manual distributed with the SATS software.

1.2. Overview. SATS has three areas of primary concern: reduction of paper, improvement of asset control by real time tracking, and introduction of electronic signatures for assets issued to supply customers. SATS improves these areas by utilizing AIT equipment and a spread spectrum radio frequency (RF). This equipment is installed throughout base supply and base itself and also utilizes mobile units called Hand-Held Terminals (HHT). SATS processes real time via terminal access to the SBSS.

1.2.1. Hardware. Some hardware is unique to SATS and some is generic and can be used for other applications. All AIT equipment must be purchased through HQ AFMC LSO/LOA, the Air Force AIT Program Office. PCs to be used for the server and workstations are the responsibility of major commands (MAJCOMs)/bases. The Local Area Network is necessary for SATS to work properly. All bases should be pressing forward to all their building and units connected to the base LAN. SATS is a software/hardware system that takes advantage of LAN technology, which is the direction for all future developed applications.

1.2.1.1. Scanning and reading. These devices are HHTs and card readers. Barcodes are scanned by the HHT to receive, move, pull, deliver and sign for assets. In Receiving, the three barcodes on the receipt document are scanned to receive assets plus the tote location where the asset actually resides. To move, pull, deliver, put away, and sign for assets, a unique SATS ID is scanned to identify the appropriate action. For issuing an asset, a card reader and smart card are used to identify personnel and initiate the electronic signature process. They produce a single label output with a unique SATS identification (SATS ID) number to track the assets. The smart card has data to identify the person; their name and rank are displayed when the card is read. The smart card also contains their level of security, the individual's personal identification number (PIN), equipment custodial status, and the organization that they can accept property for.

1.2.1.2. Printers. There are three different types of printers used by SATS. Portable and high volume AIT printers that produce barcode labels and Kyroceras that produce standard DD form 1348-1As when necessary. All labels and documents can be reproduced on demand in case any document are destroyed or cannot be scanned.

1.2.1.3. Server and workstations. The SATS server is a WIN NT operating system that manages the database, transactions, and reports. The workstations are Windows 95 client personal computers (PC) and are used for working management notices, rejects, and processing reports. These are not proprietary to SATS; these PCs can be utilized for any other WIN 95 application.

1.2.2. RF network and site survey. The RF network is comprised of Base Relay Units (BRU), controllers, and repeaters. The amount and actual place they will be installed are determined by a site survey. A site survey must be performed to determine where and how many of these pieces will be required. As part of the site survey, the amount of HHTs and workstations and their locations is also determined.

1.2.2.1. Frequency Information. A spread spectrum radio frequency 902-928-megahertz (MHz) has been approved for the Department of Defense to be used in the Continental United States, reference J 12 document number J/F 12/7075/1 7 Feb 98, overseas the frequency is 2.45 gigahertz (GHz). A letter from the Chief of Supply requesting a center frequency and referencing the above document is required before installation of SATS can be initiated. The center frequency identifies the frequency that bases use to configure SATS RF equipment. The full range from this center frequency is a plus or minus three. **EXAMPLE:** You have center frequency assignment of 915. You have a true working range of 912-918. Spread spectrum allows the signal to travel unimpeded between frequency when multiple users are working simultaneously.

1.2.3. Software. The SATS software, Info-Connect for the input/output workstations for communication to the SBSS, WIN NT for the SATS server, and WIN 95 for the workstations are all necessary. SATS will be maintained by the Standard Systems Group Supply Systems Division, HQ OSSG/LRS, and distributed to bases identified by the MAJCOM.

1.2.4. Security. SATS has unique passwords and identification numbers assigned to all users and customers. Users and customers have limited privileges that prevent unauthorized personnel from performing certain functions or signing for wrong property. A user is a person who actually uses SATS to perform their duties. A customer is a person who receives assets from base supply and uses a smart card to accept the property by inputting their PIN. The PIN is never transmitted. It resides on the smart card. All customers are briefed when they are issued the smart card not to give the card and PIN to anyone.

Section 1B—FUNCTIONAL CAPABILITIES OF SATS.

1.3. Overview. The major elements affected by SATS are Document Control, Receiving, Storage and Issue, and Pickup and Delivery (P&D). This does not mean that other elements such as Inventory, Stock Control, and Individual Equipment are not affected. Because SATS handles all issues, due-out releases, and shipment outputs from the SBSS, virtually all work centers in base supply are affected.

1.3.1. Receiving. Receiving is the primary areas of input to SATS. This is done by scanning the incoming receipts (TRIC REC) from depots and other bases, Local Purchase RECs can be input via a workstation. The output will be a single sticky back label that will be attached to the property. Instead of being stapled, the adhesive back will help ensure documents do not blow away when the receiving clerk goes on to the next asset. These outputs are rejects, management notices, shipper, TRICs ISU, DOR, and MSI and have almost all the same data a multicopy DD Form 1348-1A would have. The scanning of the REC through SATS will also clear the REC document from the SBSS. This eliminates the need of sending the REC to Document Control thus greatly reducing their work-

load. All outputs are worked in the same manner as today, clearing rejects and working management notices. Turn-ins (TRIC TINs) work the same way as REC except they are input by the workstation.

1.3.2. Tracking and Movement. When the output is an ISU, DOR, or MSI, shipping documents these assets by using the movement mode on the HHT. Movement and tracking of assets are performed by scanning the SATS ID. Each scan is written to the SATS database which can be queried by MICAP (mission capable); for example, to find out where the asset is and issue it faster. Many single assets are scanned into a single tote, like a rollaway bin; a single scan of the rollaway tote and then the new tote location. This moves all the assets in a large tote in two scans, rather than scanning the individual labels.

1.3.2.1. The SATS ID is a unique number assigned to all records created in SATS, and all records sent to SATS from SBSS.

1.3.2.2. The SATS ID is a three-field, ten-character data string. The fields can be described as follows:

Field 1 (3 characters) denotes the routing code (DKS for Shaw AFB, DKF for Langley AFB, etc).

Field 2 (2 characters) denotes the last two digits of the year (ex., 01 will change to 02, in the year 2002).

Field 3 (5 characters) denotes a sequential alphanumeric number assigned by SATS. This number will "zero fill" automatically.

1.3.3. Put Away. When assets are ready to be moved into the warehouse location, first scan the SATS ID and then the warehouse location. This confirms the asset is being put away in its proper location. Assets that do not have a warehouse location can be put away and updated in the SBSS in real time. The HHT has a put-away mode that allows the warehouse person to assign a location to the new property. A TRIC FCS, warehouse location change, is automatically sent to the SBSS and a new label is produced on the spot. These few scans provide the users with asset visibility and inventory control that has never been available before.

1.3.4. Delivery and Electronic Signature. When assets are to be issued, they are first moved to P&D by scanning the temporary tote locations in P&D. The P&D driver then uses the HHT in Delivery mode to put the asset on the truck. This is written to the SATS database and users now know the location of the asset. Upon arriving at the proper delivery destination, the customer's smart card is inserted in the HHT. The HHT displays the name and rank of the person, giving the P&D driver immediate confirmation that the person is who the card identifies. The SATS ID is scanned and the HHT checks the smart card to confirm that the person is authorized to accept the asset for that organization. If not, the HHT will identify the person as not authorized to accept assets for that organization. Once the signature is accepted, a 1SI (electronic signature) is sent to SBSS from SATS to clear the document control record (DCR). If the document is cleared on the same processing day, then the transaction history record (901) is located and the print flag is changed so that it does not create a DCR. If the document is cleared anytime after processing day, then the document control record (707) is located and the DCR is deleted. SATS extends the inventory control to the customer, therefore providing Supply better support by having full visibility and control of their assets.

1.3.5. Reports. SATS has an extensive built-in reports lists, over 25 individual options. The reports can be used for delivery time analysis to work delinquent documents. Most reports have multiple sort options to give user maximum flexibility. Accessing and running reports are controlled by approved user privileges. The privileges for SATS users are usually identified by the noncommissioned officer in charge or flight chief.

1.3.6. System Administration**.** The system administration is a very important part of SATS. The system administrator is in charge of all the internal workings of the system. This person is responsible for issuing all user and customer identification numbers and privileges and also for maintaining the database, restoring files, initializing the RF network, and the SBSS SATS interface.

Section 1C—SATS WORKSTATION PROCESSING

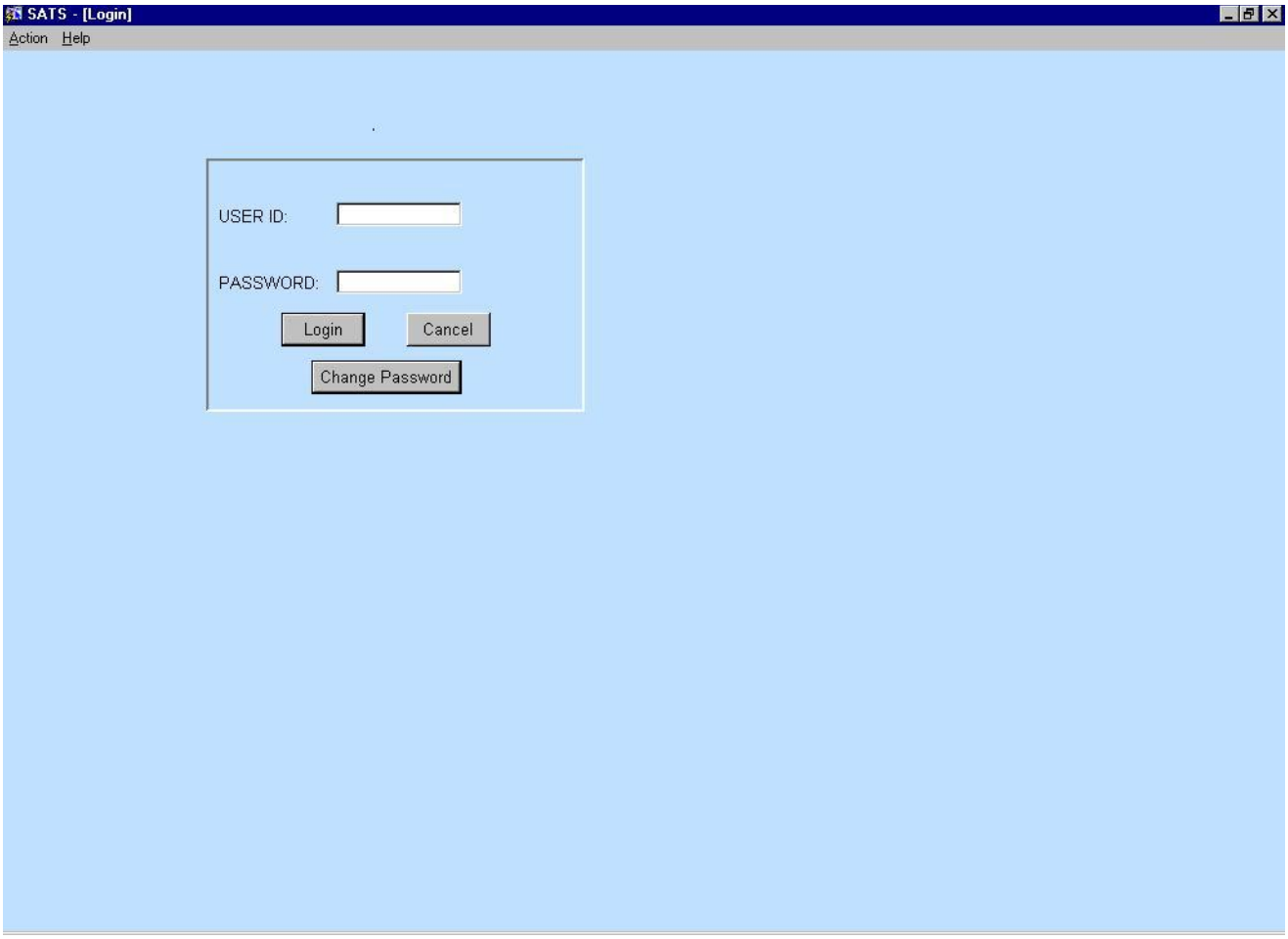
1.4. Overview. This section includes detailed instructions on the techniques used to navigate through SATS screens, perform searches by using the Choices boxes, select printers for your label output, etc. You will use these actions throughout SATS when processing from the workstation computer.

1.4.1. After double-clicking on the SATS icon on the workstation desktop, the "Welcome" screen, shown in Figure 1.1. will be displayed:

Figure 1.1. Welcome Screen.

1.4.1.1. To Login click on the image or select "Action/Login" from the menu bar, this will bring up the login screen, figure 1.2. Following a successful login, you will be allowed to choose from various SATS processes in the SATS "Entry" screen. The processes available to you depend upon your user privileges. Privileges are determined according to supervisors' requests, and are authorized by the SATS System Administrator.

Figure 1.2. Login Screen.



1.4.1.2. An icon for each SATS process appears at the top of SATS screens (see **Figure 1.3.** through **Figure 1.16.**). Once you are logged into SATS, regardless of what process you are in, an icon for the other SATS processes are available. Click on an icon, to access the corresponding process.

1.4.1.2.1. Login Icon. The **Login** icon is used to log off the current user and allow another user to log in .

Figure 1.3. Login Icon.

1.4.1.2.2. Receipt Icon. The **Receipt** icon is used to access the Receipt process. (see part 2, chapter 10).

Figure 1.4. Receipt Icon

1.4.1.2.3. Reject and Movement Icon. The **Reject and Movement** icon is used to access the Movement and Reject process (see part 2, chapter 10).

Figure 1.5. Reject and Movement Icon

1.4.1.2.4. Put Away Icon. The Put Away icon is used to access the Put Away process (see part 2, chapter 10).

Figure 1.6. Put Away Icon.

1.4.1.2.5. Pull Icon. The **Pull icon** is used to access the Pull process (see part 2, chapter 10).

Figure 1.7. Pull Icon.

1.4.1.2.6. Delivery Icon. The **Delivery** icon is used to access the Delivery process .

Figure 1.8. Delivery Icon.

1.4.1.2.7. Turn In Icon. The **Turn In** icon is used to access the Turn In process (see part 2, chapter 13).

Figure 1.9. Turn In Icon.

1.4.1.2.8. Reports Icon. The **Reports** icon is used to access the Reports process.

Figure 1.10. Reports Icon.

1.4.1.2.9. Administration Icon. The **Administration** icon is used to access the Administration process.

Figure 1.11. Administration Icon.

1.4.1.2.10. Maintenance Icon. The **Maintenance** icon is used to access the Maintenance process. (see part 2, chapter 10.)

Figure 1.12. Maintenence Icon.

1.4.1.2.11. SBSS Interface Icon. The **SBSS Interface** icon is used to access the SBSS Interface process.

Figure 1.13. SBSS Interface Icon.

1.4.1.2.12. Help Icon. The **Help** icon is used to access the Help file.

Figure 1.14. Help Icon.

1.4.1.2.13. Exit Icon. The **Exit** icon is used to Exit and close the SATS program.

Figure 1.15. Exit Icon.

No Entry Icon. The **No Entry** icon appears when the user does not have access to a process or the user is currently in a particular process.

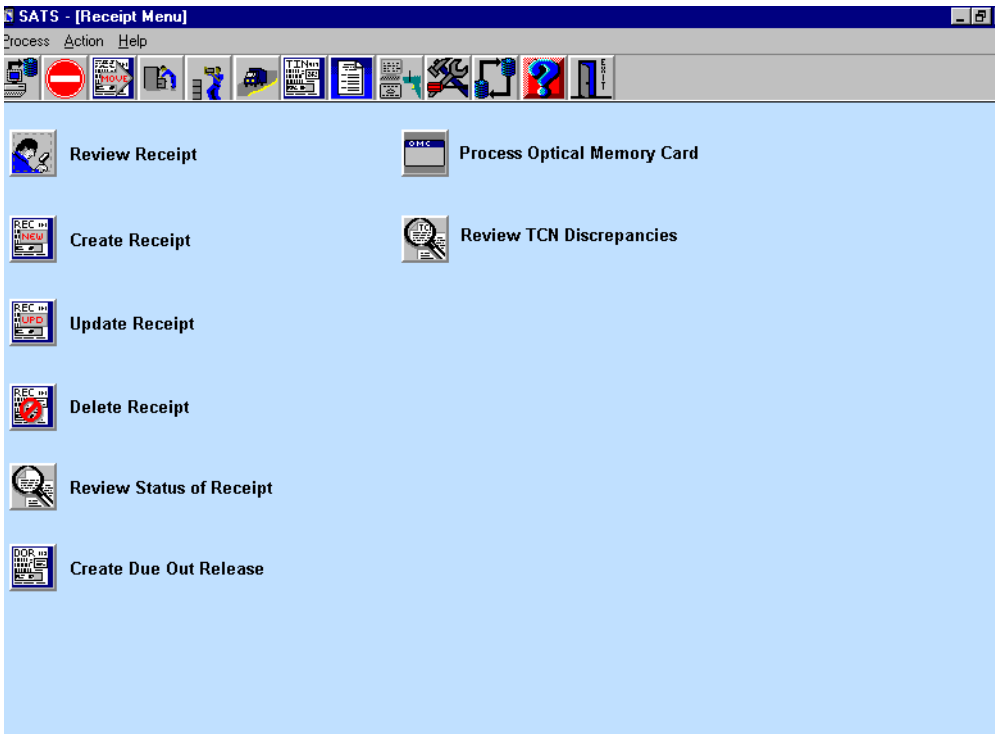
Figure 1.16. No Entry Icon.

1.4.2. The Process menu depicted in figure 1.17. is located in the upper left-hand corner of SATS screens, and is used to access SATS processes. Click on “Process” and then click the SATS process you want to use.

Figure 1.17. Process Menu.

1.4.3. You click on various action icons to access the sub-processes. Each of the Action icons that display throughout SATS are identified by their respective descriptive titles, as shown in Figure 1.18. below; they are not depicted separately in this chapter, but they are individually explained in their respective chapter.

Figure 1.18. Action Icons.



1.4.3.1. To move the cursor from field to field, or within different portions of a field, press the Tab key on the keyboard or click in the field with the mouse.

1.4.3.2. Data fields with a white background can have data entered into them. Fields with a gray background are disabled fields that cannot have data entered into them, cannot be edited, or are automatically filled in by SATS.

1.4.4. The Action menu (located in the menu bar in the upper left-hand corner of SATS screens) becomes available once you select a SATS process. The Action menu is used to navigate through sub-processes. Select the Action menu from the menu bar and select the sub-process you want to use.

1.4.4.1. The Action menu is also used to perform certain actions within a sub-process; for example, exit the current sub-process to return to the main menu, or it can be used as a shortcut to other actions within the sub-process. Select the Action menu while in a sub-process from the menu bar and select the action you want to perform or click on the button of the Action desired.

1.4.5. The Help menu is located in the upper left-hand corner of SATS screens in the menu bar, and is used to access the SATS online Help system. Users can access Help at any time while in SATS. Select the Help menu from the menu bar and select one of the following Help processes.

1.4.5.1. The Contents option will access the SATS online help.

1.4.5.2. The Context option will access the help topic for the process you are in at the time.

1.4.5.3. The Search option will allow you to locate a specific help topic, and review the information on that topic.

1.4.5.4. The About SATS option will display the version of SATS being used.

1.4.6. Choice boxes are used to find records within SATS. Clicking on a down arrow next to an input field will display a Choices box with all the records available for the field you are in.

1.4.6.1. You can perform searches inside the Choices box or the input field. Enter a known portion of the record into the input field and press the Enter key, and the Choices box will be displayed, showing the closest-matching records.

1.4.6.2. You can also perform a search directly from the Choices box. Enter a known portion of the record in the "Find" input field of the Choices box and press Enter; the choices will be narrowed down according to your input.

1.4.6.3. You can also locate records by scrolling through the Choices box using the arrows on the left- hand side of the Choices box. (The arrow keys on the keyboard can also be used to scroll up or down, one line at a time, through the Choices box. The "Page Up" and "Page Down" keys on the keyboard will scroll you up or down through the Choice Box multiple lines at a time).

1.4.7. Throughout SATS, you will be prompted to select printers on which to print labels and 1348-1A forms. Certain processes in SATS will automatically prompt you to select a printer for your output. You can also send records to a printer "manually," by clicking a Print button. Either way, the steps to select a particular printer are the same.

1.4.7.1. When you are automatically prompted to select a printer, you will see an information window prompting you to select a printer, click OK, a printer choice box will be displayed, and select the printer you wish to print to.

1.4.7.1.1. If you choose to "manually" print a record, begin the process by clicking a Print button. The buttons "Print" and "Print Label" are both used to print adhesive labels; the "Print" button is also used to print reports. The "Print Form" button is used to print 1348-1A forms. Click the desired button and the printer Choices box will be displayed.